

REMARKS

The Applicant thanks Examiner Chambliss for the June 17, 2005 telephone interview and invites the Examiner to consider the following remarks.

In the Office Action dated June 2, 2005 the Examiner stated that the application contains claims directed to two species: A1. a hole completely through the substrate after the step of providing a MEMS device on a first side of a substrate, and A2. a MEMS device formed on substrate after bonding a wafer to the substrate and finish forming a hole completely through the substrate after the step of thinning.

Briefly, claims 1-15 are directed to a method for manufacturing a vacuum or hermetically packaged micromachined or MEMS device having at least one substantially vertical feedthrough. The method of independent claim 1 includes the steps of providing a micromachined or MEMS device fabricated on a first side of a substrate and located within a vacuum or hermetic cavity, forming at least one hole completely through the substrate between first and second sides of the substrate after the step of providing, and forming a path of electrically conductive material connecting the micromachined or MEMS device and the second side of the substrate through the at least one hole to form the at least one substantially vertical feedthrough.

Claims 16-30 are directed to a method for manufacturing a vacuum or hermetically packaged micromachined or MEMS device. The method of independent claim 16 includes the steps of providing a wafer and a substrate having first and second sides, partially forming at least one hole in the first side of the substrate, bonding the wafer to the substrate to obtain a device substrate after the step of partially forming, fabricating a micromachined or MEMS device from the wafer after the step of bonding, positioning a capsule having a concave surface on the device substrate over the micromachined or MEMS device, bonding the capsule to the device substrate to form a vacuum or hermetic cavity enclosing the micromachined or MEMS device and to form a bonding area which provides a hermetic seal around the vacuum or hermetic cavity, thinning the substrate down, finish forming at least one hole completely through the substrate between the first and second sides after the step of thinning, and forming a path of electrically conductive material connecting the

micromachined or MEMS device and the second side of the substrate through the at least one hole.

Claims 31-40 are for a vacuum or hermetic packaged micromachined or MEMS device manufactured in accordance with the steps of claim 16.

According to M.P.E.P. § 806.04(d), “a generic claim should include no material element additional to those recited in the species claims.... [T]he claims to the species which can be included in a case in addition to a single species must contain all the limitations of the generic claim.” Independent claim 16 includes all of the limitations set forth in independent claim 1. While independent claim 16 includes limitations in addition to those contained in independent claim 1, this merely indicates that claim 16 is a single species of the generic claim 1. Consequently, the requirement of the Examiner is traversed.

However, since a complete reply to this requirement must include the election of the invention to be examined, Applicants’ Representative hereby elects those claims of species A2. Claims 16-30 and 31-40 (device manufactured in accordance with the steps of claim 16) are readable on the elected species.

Consequently, in view of the above and in the absence of art other than the art already of record in this application, Applicants’ Representative respectfully submits the application is in condition for allowance which allowance is respectfully requested.

Respectfully submitted,

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